

STAPH/STREP SELECTIVE SUPPLEMENT

FOR IN VITRO DIAGNOSTIC USE

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INTENDED USE

PRO-LAB Staph/Strep Selective Supplement is an antibiotic supplement used to enhance the isolation of *Staphylococcus aureus* and streptococci.

SUMMARY AND EXPLANATION

The basal medium, Columbia Agar, was developed in 1966 by Ellner et al.¹ It contains starch, following the work of Casman² (1947) which showed that this enhanced the haemolytic actions of some streptococci and also increased the growth of *Neisseria*. Columbia Agar has since been proven to be a versatile and nutritious media, which can be used with the addition of blood for routine isolation. The medium can also be used for selective culture with the addition of blood and antibiotics.

Ellner et al.¹ described the use of the medium for the selective culture of Gram positive cocci. The medium was supplemented with 5% sterile defibrinated blood, colistin sulphate (10mg/litre) and nalidixic acid (15 mg/litre). The new medium suppressed the growth of *Proteus*, *Klebsiella* and *Pseudomonas sp.* but permitted unrestricted growth of staphylococci, haemolytic streptococci and enterococci.

DESCRIPTION

Accurate quantities of colistin sulphate and nalidixic acid are lyophilized and provided in individually labelled vials. Each vial is sufficient to supplement 1000 mls of prepared medium.

FORMULA

Each vial contains:

Colistin Sulphate 10 mg Nalidixic Acid 15 mg

PROCEDURE

To reconstitute each vial of PRO-LAB Staph/Strep Selective Supplement add, aseptically, 10 ml of sterile distilled water. After closing the vial, gently agitate to assist reconstitution.

Prepare Columbia Agar according to the manufacturer's instructions, autoclave and cool to 55°C. Add the reconstituted contents of one vial of PRO-LAB Staph/Strep Supplement to a final 1000 ml prepared medium. Mix gently. Supplement the medium with 5-7% sterile defibrinated horse blood, mix thoroughly and pour into sterile petri dishes. Overnight storage at 4°C is recommended to allow suitable equilibration. For extended storage at 4°C, eg. up to 7 days, plates should be contained in sealed plastic sleeves or similar packaging.

IN USE

- 1. Before using selective medium ensure that plates are dry.
- Inoculate test material onto surface of agar using sterile inoculating loop (available from PRO-LAB) or a sterile swab in such a manner as to encourage the growth of isolated colonies.
- 3. Incubate plates aerobically at 37°C.
- 4. Examine after incubation (18 to 24 hours).

SAFETY PRECAUTIONS

- 1. PRO-LAB Staph/Strep Selective Supplement is offered only as an in vitro material and is in no way intended for a curative or prophylactic purpose.
- 2. During and after use, handle all materials in a manner conforming to Good Laboratory Practices and consider at all times that material under test should be regarded as a potential biohazard if mishandled.

PRESENTATION

PRO-LAB Staph/Strep Selective Supplement is supplied 10 vials per box (lyophilized).

STORAGE

PRO-LAB Staph/Strep Selective Supplement must be stored at 2° to 8° C. Kept under these conditions it may be used up to date of expiry shown on product label.

REFERENCES

- 1. Ellner, P.D., Stoessel, C. J., Drakeford, E. and Vasi, F. 1966. Am. J.Clin. Path. 45: 502-504.
- 2. Casman, E.P. 1947. Am. J. Clin. Path. 17: 281-289.

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